

IN THE CLAIMS

1. (Currently amended) A method for ~~communicating data between a simulation of~~ simulating an electronic device that interacts with ~~and a network operating at a speed higher than the electronic device as simulated,~~ the simulation being carried out by a program executing in a host computer, the simulation includes simulating the electronic device's interaction with the network, the method comprising:

(a) receiving data packets designating the electronic device from the network through a network interface; and

(b) ~~storing the data packets received from the network in a first buffer in memory;~~

(~~[[c]]~~ b) ~~transmitting the data packets received from the network to the simulation through a software interface~~ to provide data packets for simulating the electronic device's interaction with the network;

(d) ~~receiving data packets from the simulation through the software interface; and~~

(e) ~~transmitting the data packets received from the simulation to the network through the network interface.~~

2. (Currently amended) The method of claim 1 further comprising storing the data packets received from the network in a ~~from the simulation in a second~~ buffer allocated in the memory of the host computer.

3-4. (Canceled)

5. (Currently amended) The method of claim [[1]] 2, further comprising changing the size of the ~~first~~ buffer at run time.

6. (Currently amended) The method of claim [[1]] 2, further comprising discarding packets of data when the ~~first~~ buffer is full.

7. (Currently amended) The method of claim [[1]] 2, further comprising keeping a record of the data packets received from the network, ~~the data packets transmitted to the simulation, the data packets received from the simulation; and the data packets transmitted to the network.~~

8. (Currently amended) The method of claim 7, further comprising displaying the record ~~on a screen.~~

9. (Original) The method of claim 7, further comprising storing the record in a file.

10. (Original) The method of claim 1, further comprising recording the throughput of the data packets.

11. (Original) The method of claim 1 further comprising modifying the packets to make the packets suitable for receipt by the simulation.

12. (Original) The method of claim 11 wherein modifying includes removing a preamble from a data packet.

13. (Currently amended) The method of claim 1, wherein the receiving data

packets from the network, ~~and the storing the data packets received from the network and~~
the transmitting the data packets ~~received from the network~~ to the simulation are
executed in a first single thread ~~and the receiving data packets from the simulation and~~
~~the transmitting the data packets received from the simulation are executed in a second~~
thread.

14. (Currently amended) The method of claim 1, wherein the receiving data
packets from the network ~~and the storing of data packets received from the network are~~ is
executed in a first thread, and the transmitting the data packets ~~received from the network~~
to the simulation is executed in a second thread, ~~the receiving data packets from the~~
~~simulation and the transmitting the data packets received from the simulation are~~
executed in a third thread.

15-16. (Canceled)

17 (Previously presented) A method for testing a system for connecting an
electronic device under simulation to a network, wherein the simulation is to be carried
out by software in a computer, the method comprising:

(a) generating a data packet using software in a first computer;

(b) transmitting the data packet, from the first computer, to a second
computer;

(c) transmitting back the data packet received by the second computer to
the first computer;

(d) comparing the data packet received by the first computer with the data packet that was sent by the first computer; and

(e) reporting an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

18. (Currently amended) A method for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

(a) generating a data packet using software in a first computer;

(b) from the first computer, transmitting the data packet to a second computer;

(c) at the second computer, storing the data packet received from the first computer in a first buffer in the second computer;

(d) at the second computer, transmitting the data packet stored in the first buffer to a third computer;

(e) at the third computer, transmitting back the data packet received to the second computer;

(f) at the second computer, transmitting the data packet received from the third computer to the first computer;

(g) at the first computer, comparing the data packet received with the data packet that was sent; and

(h) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.

19-24. (Canceled).

Please add Claims 25-63 as follows:

25. (New) A method for simulating an electronic device that interacts with a network, the simulation of the electronic device being carried out by a program executing in a host computer, the simulation including simulating the electronic device's interaction with the network, the method comprising:

(a) receiving data packets designating the electronic device as a source through a software interface from the simulation of the electronic device's interaction with the network; and

(b) transmitting the data packets to the network through a network interface.

26. (New) The method of claim 25 further comprising storing the data packets received from the simulation in a buffer allocated in the memory of the host computer.

27. (New) The method of claim 26, further comprising changing the size of the buffer at run time.

28. (New) The method of claim 26, further comprising discarding packets of data when the buffer is full.

29. (New) The method of claim 25, further comprising keeping a record of

the data packets received from the simulation.

30. (New) The method of claim 29, further comprising displaying the record.

31. (New) The method of claim 29, further comprising storing the record in a file.

32. (New) The method of claim 25, further comprising recording the throughput of the data packets.

33. (New) The method of claim 25, further comprising modifying the data packets to make the packets suitable for receipt by the network.

34. (New) The method of claim 33, wherein modifying includes inserting a preamble in a data packet.

35. (New) The method of claim 25, wherein the receiving data packets from the simulation and the transmitting the data packets received from the simulation to the network are executed in a single thread.

36. (New) The method of claim 25, wherein the receiving data packets from the simulation is executed in a first thread and the transmitting the data packets to the network is executed in a second thread.

37. (New) A computer-readable medium for use in connecting a simulation of an electronic device to a network, wherein the simulation is to be carried out by a program executing in a host computer, and wherein the simulation of the electronic device includes simulating the electronic device's interaction with the network; the

computer-readable medium comprising computer-executable instructions for:

receiving data packets designating the electronic device from the network through a network interface; and

transmitting the data packets to the simulation through a software interface to provide data packets for simulating the electronic device's interaction with the network.

38. (New) The computer-readable medium of claim 37, further comprising computer instructions for storing the data packets received from the network in a buffer allocated in the memory of a host computer.

39. (New) The computer-readable medium of claim 38, further comprising computer-executable instructions for changing the size of the buffer at run time.

40. (New) The computer-readable of medium claim 38, further comprising computer-executable instructions for discarding packets of data when the buffer is full.

41. (New) The computer-readable medium of claim 37, further comprising computer instructions for keeping a record of the data packets.

42. (New) The computer-readable medium of claim 41, further comprising computer-executable instructions for displaying the record.

43. (New) The computer-readable medium of claim 41, further comprising computer-executable instructions for storing the record in the storage medium.

44. (New) The computer-readable medium of claim 37, further comprising

computer-executable instructions for recording the throughput of the data packets.

45. (New) The computer-readable medium of claim 37, further comprising computer-executable instructions for modifying the data packets for receipt by the simulation.

46. (New) The computer-readable medium of claim 45, wherein the computer-executable instructions for modifying includes computer-executable instructions for removing a preamble from a data packet.

47. (New) A computer-readable medium for use in connecting a simulation of an electronic device to a network, wherein the simulation is to be carried out by a program executing in a host computer, and wherein the simulation of the electronic device includes simulating the electronic device's interaction with the network; the computer-readable medium comprising computer-executable instructions for:

receiving data packets designating the electronic device as a source through a software interface from the simulation of the electronic device's interaction with the network; and

transmitting the data packets received from the simulation to the network through a network interface.

48. (New) The computer-readable medium of claim 47, further comprising computer-executable instructions for storing the data packets received from the simulation in a buffer allocated in the memory of the host computer.

49. (New) The computer-readable medium of claim 48, further comprising computer-executable instructions for changing the size of the buffer at run time.

50. (New) The computer-readable medium of claim 48, further comprising computer-executable instructions for discarding packets of data when the buffer is full.

51. (New) The computer-readable medium of claim 47, further comprising computer-executable instructions for keeping a record of the data packets.

52. (New) The computer-readable medium of claim 51, further comprising computer-executable instructions for displaying the record.

53. (New) The computer-readable medium of claim 51, further comprising computer-executable instructions for storing the record in the storage medium.

54. (New) The computer-readable medium of claim 47, further comprising computer-executable instructions for recording the throughput of the data packets.

55. (New) The computer-readable medium of claim 47, further comprising computer-executable instructions for modifying the data packets to make the packets suitable for receipt by the network.

56. (New) The computer-readable medium of claim 55, wherein computer-executable instructions for modifying includes computer-executable instructions for inserting a preamble in a data packet.

57. (New) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by

software in a computer, the method comprising:

- (a) a source for generating a data packet using software in a first computer;
- (b) an interface that transmits the data packet from the first computer to a second computer, and that receives the data packet back from a second computer; and
- (c) a computer program in the first computer that compares the data packet received by the first computer with the data packet that was sent by the first computer, and reports an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

58. (New) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

- (a) a source that generates a data packet using software in a first computer;
- (b) an interface in the first computer that transmits the data packet to a second computer, and receives the data packet back from the second computer;
- (c) a program running on the second computer that stores the data packet received from the first computer in a buffer allocated in the second computer;
- (d) an interface in the second computer that receives the data packet from the first computer and returns the data packet received from the third computer to

the first computer;

(e) an interface in the second computer that transmits the data packet stored in the buffer to a third computer and receives back the data packet from the third computer;

(f) an interface in the third computer that receives the data packet from the second computer and transmits the data packet to the second computer; and

(g) a program running in the first computer that compares the data packet received at the first computer with the data packet that was sent from the first computer; and reports an error if the data packet received by the first computer does not match the data packet sent by the first computer.

59. (New) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

(a) generating a data packet using software in a first computer;

(b) transmitting the data packet, from the first computer, to a second computer;

(c) transmitting back the data packet received by the second computer to the first computer;

(d) comparing the data packet received by the first computer with the data

packet that was sent by the first computer; and

(e) reporting an error if the data packet received by the first computer does not match the data packet that was sent by the first computer.

60. (New) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

(a) generating a data packet using software in a first computer;

(b) from the first computer, transmitting the data packet to a second computer;

(c) at the second computer, storing the data packet received from the first computer in a first buffer in the second computer;

(d) at the second computer, transmitting the data packet stored in the first buffer to a third computer;

(e) at the third computer, transmitting back the data packet received to the second computer;

(f) at the second computer, transmitting the data packet received from the third computer to the first computer;

(g) at the first computer, comparing the data packet received with the data packet that was sent; and

(h) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.

61. (New) A method for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the method comprising:

(a) generating a data packet using software in a first computer;

(b) from the first computer, transmitting the data packet to a second computer;

(c) at the second computer, transmitting the data packet to a third computer;

(d) at the third computer, transmitting back the data packet received to the second computer;

(e) at the second computer, transmitting the data packet received from the third computer to the first computer;

(f) at the first computer, comparing the data packet received with the data packet that was sent; and

(g) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.

62. (New) An apparatus for testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by

software in a computer, the method comprising:

- (a) a source that generates a data packet using software in a first computer;
- (b) an interface in the first computer that transmits the data packet to a second computer and receives the data packet back from the second computer;
- (c) an interface in the second computer that receives the data packet from the first computer and returns the data packet received from the third computer to the first computer;
- (d) an interface in the second computer that transmits the data packet to a third computer and receives back the data packet from the third computer;
- (e) an interface in the third computer that receives the data packet from the second computer and transmits the data packet to the second computer; and
- (f) a program running in the first computer that compares the data packet received at the first computer with the data packet that was sent from the first computer; and reports an error if the data packet received by the first computer does not match the data packet sent by the first computer.

63. (New) A computer-readable medium, for use in testing a system for connecting an electronic device under simulation to a network, wherein the simulation is to be carried out by software in a computer, the computer-readable medium comprising computer-executable instructions for:

- (a) generating a data packet using software in a first computer;

(b) from the first computer, transmitting the data packet to a second computer;

(c) at the second computer, transmitting the data packet to a third computer;

(d) at the third computer, transmitting back the data packet received to the second computer;

(e) at the second computer, transmitting the data packet received from the third computer to the first computer;

(f) at the first computer, comparing the data packet received with the data packet that was sent; and

(g) reporting an error if the data packet received by the first computer does not match the data packet sent by the first computer.